CHEMISTRY
RPMT - 2005

Q.1 dfY'k;e ,lhVV dk xe dju ij curk g –
(1) ,flV ,YMhgkbM (2) eFku (3) ,flfVd vEy (4) ,lhVku

Q.2 dfu tkjk vfHkfØ;k dku nrk g –
(1) eFkuky (2) VkbDykjk ,Fkuky
(3) 2, 2-MkbDykjk ikiuky (4) lHkh

Q.3 n-C;Vuky fdldk mnkgj.k g –
(1) ikFkfed ,Ydkgy (2) f}rh;d ,Ydkgy (3) rrh;d ,Ydkgy (4) bue ldkbZ ugh

Q.4 Vkyu vfHkdeZd g –
(1) vekfudy D;il DykjkbM (2) vekfudy D;il vkDlkbM
(3) vekfudy flYoj ckekbM (4) vekfudy flYoj ukbVV

Q.5 Qhuky dk LoHkko g –
(1) vEyh; (2) {kkjh; (3) mnklhu (4) bue ldkbZ ugh

Q.6 dkcu e byDVku dh l[;k g –
(1) 4 (2) 6 (3) 8 (4) 10

Q.7 Y;dkl vfHkdeZd g –
(1) lkUn HCl + $ZnCl_2$ (2) dil HCl + $ZnCl_2$ (3) $ZnCl_2$ (4) Zn + Cl

Q.8 $KMnO_4$ e Mn dh vkDlhdj.k l[;k g –
(1) 6 (2) 7 (3) 5 (4) 2

Q.9 NH_3 e N dk ldj.k g –
(1) sp (2) sp^2 (3) sp^3 (4) sp^3d

Q.10 ,Fkhfyu e σ o π cU/kk dh l[;k g –
(1) 5σ, 1π (2) 3σ, 3π (3) 2σ, 4π (4) 4σ, 2π

Q.11 ukfHkd e ik;s tkrs g &
(1) e, p (2) p, n (3) e, n (4) bue ldkbZ ugh

Q.12 leko;ork d fy, D;k lekurk vko';d g –
(1) ljpuk l=k (2) jklk;fud x.k (3) v.k l=k (4) Hkkfrd x.k

Q.13 fuEu e lcdkulk v/koh; g –
(1) C–H (2) O–H (3) F–F (4) N–H

Q.14 bFkj fuek.k dh vfHkfØ;k g –
(1) foy;ela (2) F. C. R
(3) oVt vfHkfØ;k (4) bue ldkbZ ugh

Q.15 $k_p = k_c$ gksxk –
(1) $H_2 + I_2 \rightleftharpoons 2HI$ (2) $2SO_2 + O_2 \rightleftharpoons 2SO_3$
(3) $PCl_5 \rightleftharpoons PCl_3 + Cl_2$ (4) $N_2 + 3H_2 \rightleftharpoons 2NH_3$

Q.16 0°C rki ij ,fuyhu dh HNO_2 + HCl dh fØ;k l D;k curk g –
(1) Qhuky (2) ukbVkscthu (3) Mkb, tk ;kfxd (4) bue l dkbZ ugh

Q.17 mRØe.kh; vfHkfØ;k e gkrk g –
(1) nkuk rjQ dh nj leku gkrh g (2) leku lkUnrk gkrh g
(3) vfHkfØ;k ,d vkj foLFkkir gk tkrh g (4) bue l dkb ugh

Q.18 NH_3 fuEkk.k d vudy ifjfLFkfr g –
(1) de rki o mPp nkc
(2) mPp rki o mPp nkc o vfHkdkjdk dh mPp lkUnrk
(3) de nkc o mPp rki o vfHkdkjdk dh de lkUnrk
(4) de rki o de nkc o vfHkdkjdk dh de lkUnrk

Q.19 lkUn HIo Mkb,fFkybFkj
(1) ,fFky vk;kMkbM (2) ,fFky ,Ydkgy (3) ,Fku (4) efFky vk;kMkbM

Q.20 $Cr_2O_7^{-2}$ e Cr dh vkDlhdj.k voLFkk g –
(1) 2 (2) 4 (3) 6 (4) 7

Q.22 N dk byDVkfud foU;kl gkxk &
(1) $1s^2, 2s^2, 2p_x^1, 2p_y^1, 2p_z^1$ (2) $1s^2, 2s^2, 2p_x^3$
(3) $1s^2, 2s^2, 2p_x^2, 2p_y^1$ (4) $1s^2, 2s^2, 2p_x^2, 2p_y^1$

Q.23 ifrpEcdh;rk dk dkj.k g –
(1) v;fXer byDVku (2) ;fXer byDVku
(3) /kuko'k d dkj.k (4)

Q.24 cthu dh ,jkefVd io fÙk g –
(1) M. O. T. (2) vuukn
(3) ,jkefVd ifrLFkkiu (4) lHkh

Q.25 vkLVokYM dk lEcU/k g –
(1) fo/kr vi?kVu (2) mRijd
(3) n0; vuikrh fu;e (4) forj.k fu;e

Q.26 n0; vuikrh fØ;k dk fu;e fdlu fn;k –
(1) xYcx ,o okx (2) cFkykV (3) (4)

Q.27 HI d cuu d fy, K = 50 gA rk fo;ktu d fy, K dk eku fdruk gkxk –
(1) 0.02 (2) 0.2 (3) 50 (4) 5

Q.28 ijek.k Øekd l rkRi;; g –
(1) ikVku dh l[;k (2) U;Vku dh l[;k (3) ijek.k n0;eku (4) l;kt drk

Q.29 fd.ou g –
(1) Å"ek'kk"kh (2) Å"ek{kih (3) nkuk (4) dkbZ ugh

Q.30 HCOOH + lkUn H_2SO_4 ⟶ l D;k cuxk –
(1) CO_2 (2) CO (3) Oxalic acid (4) CH_3COOH

Q.31 lokf/kd DoFkukd g–
(1) CH_3CHO (2) $C_2H_5OC_2H_5$ (3) C_2H_5OH (4) C_4H_{10}

Q.32 e[; Dok.Ve l[;k n'kkrh g–
(1) ijek.k dk vkdkj (2) pØ.k dk.kh; lox
(3) d{kd dk.kh; lox (4) d{kd dk vfHkfoU;kl

Q.33 $CH \equiv CH$ e H ijek.k gkxk &
(1) vEyh; (2) {kkjh; (3) mnklhu (4) bue l dkb ugh

Q.34 Dykjk Qke ckgjh gok o idk'k l fØ;k dj cukrk g–
(1) CCl_4 (2) $COCl_2$ (3) eLVM xl (4) CH_3Cl

Q.35 eFku dk c/k dk.k gkrk g–
(1) 109° 28' (2) 180° (3) 104. 50° (4) 45°

Q.36 ftIle l=k g–
(1) $CaSO_4.2H_2O$ (2) $CaSO_4.½H_2O$ (3) $MgSO_4.7H_2O$ (4) $CaSO_4.H_2O$

Q.37 ckDlkbM v;Ld g &
(1) $Al_2O_3.2H_2O$ (2) $Al_2O_3.H_2O$ (3) $Al_2O_3.3H_2O$ (4) $Al_2O_3.½H_2O$

Q.38 $HCHO + NH_3 \longrightarrow ?$
(1) Qkeyhu (2) gDlkefFky VVk ,feu
(3) cgyd (4) bue l dkb ugh

Q.39 ckj ekMy Li"V djrk g–
(1) H d LiDVe dk (2) ,dy byDVku;Dr ijek.k d LiDVe dk
(3) gkbMkt u v.k d LiDVe dk (4) Åtk LiDVe

Q.40 fdle OH leg ugh g?
(1) Qhuky (2) dkckfDlfyd vEy (3) ,YMhgkbM (4) ,Ydkgy

Q.41 ikpo vkor e fdru rRo ik; tkr g–
(1) 8 (2) 10 (3) 18 (4) 32

Q.42 ukfHkd dk vkdkj gkrk g–
(1) cm (2) A° (3) Fermi (4) Amu

Q.43 Qhu¦y fdld lkFk vfHkfØ;k dj cdykbV nxk–

(1) HCHO (2) CH_3CHO (3) $CH_3-\underset{\underset{O}{\|}}{C}-CH_3$ (4) $AlCl_3$

Q.44 teu flYoj g–
(1) Cu + Zn + Ni (2) Cu + Au + Ag (3) Al + Ni (4) Cu + Sn + Ag + Ni

Q.45 ,flfVy Dykjk bM $LiAlH_4$ d }kjk vip;u ij nxk–
(1) C_2H_5OH (2) CH_3COOH (3) CH_3CHO (4) $CH_3CH_2NH_2$

Q.46 f'kQ {kkj d lkFk xykch jx nxk &
(1) ,YMhgkbM (2) dhVku (3) vEy (4) bFkj

Q.47 Lo; lpd g–
(1) $KMnO_4$ (2) MeOH (3) HPh (4) fQuky jM

Q.48 vkDlhdj.k e gkrk g –
(1) byDVku dk gkl (2) byDVku dk tMuk (3) ikVku dk fudyuk (4) ikVku dk tMuk

Q.49 fÝMy Øk¶V vfHkfØ;k e mRijd g –
(1) Anhy. $AlCl_3$ (2) $AlCl_3$ (3) $ZnCl_2$ (4) bue l dkb ugh

Q.50 vk;kMkQke ijh{k.k nrk g –
(1) CH_3COOH (2) CH_3COCH_3 (3) $CH_3COOC_2H_5$ (4) CH_3COCl

Q.51 $Zn + H_2SO_4 \longrightarrow ZnSO_4 + H_2$
e ZnD;k gkrk g –
(1) vip;u (2) vkDlhdj.k
(3) jMkDl vfHkfØ;k (4) bue l dkb ugh

Q.52 ,flfVyhu dh vkd fr gkrh g –
(1) j[kh; (2) pr"Qydh; (3) fijfeMh; (4) ox leryh;

Q.53 ikoj ,Ydkgy gkrk g –
(1) 95% ,Ydkgy (2) iVky + gkbMkdkcu + C_2H_5OH
(3) fLiV CH_3OH (4) fLiV C_2H_5OH

Q.54 dkul Dykjhu dh fØ;k'khyrk de gkxh –
(1) okbfuy Dykjkbd (2) ,fyy Dykjkbd (3) efFky Dykjkbd (4) ,fFky Dykjkbd

Q.55 lYQkbd v;Ldk dk lkUn.k lekU;r% fdld }kjk fd;k tkrk g –
(1) >kx lyou fof/k (2) pEcdh; fof/k
(3) x:Ro fof/k (4) gkFk l NkVuk

Q.56 $CH_2 = CH—CH_2—Cl$ dk IUPAC uke g –
(1) ikfifuy Dykjkbd (2) 1-Dykjk-3-ikihu
(3) okbfuy Dykjkbd (4) 3-Dykjk-1-ikihu

Q.57 ckb;jV ijh{k.k nrk g –
(1) ;fj;k (2) ,ehu (3) ukbVk leg (4) bue l dkb ugh

Q.58 xeDlhu gkrk g –
(1) BHC (2) cfty Dykbjkd (3) Dykjkcthu (4)

Q.59 lcl icy vEy g –
(1) CH_3COOH (2) $CH_2ClCOOH$ (3) $CHCl_2COOH$ (4) CCl_3COOH

Q.60 Fe^{+2} l Fe^{+3} e D;k ifjoru gkxk –
(1) byDV'u nxk (2) byDV'u yxk (3) ikVku R;kxrk g (4) ikVku yrk g

Q.61 QkVkxkQh fQYe cuku e i;Dr gkrk g
(1) AgCl (2) AgBr (3) Ag_2O (4) AgF

Q.62 fdle C—C c/k yEckb U;ure g–
(1) C_2H_5OH (2) C_2H_4 (3) C_2H_2 (4) bue l dkb ugh

Q.63 c;j vfHkded fdld ijh{k.k e mi;kx gkrk g –
(1) vkDlhdj.k (2) f}cU/k dh tkp dju e (3) Xydkl dh igpku (4) vip;u

Q.64 vf/kdre vk;uu foHko fdl dk g –
(1) H (2) Li (3) B (4) Na

Q.65 dkfcy ,ehu vfHkfØ;k e ,Ydkgyh KOH fdl d lkFk vfHkfØ;k djrk g –
(1) $CHCl_3$ + Ag (2) CH_3CN + 1° ,ehu (3) $CHCl_3$ + 1° ,ehu (4) $CHCl_3 + HNO_3$

Q.66 N dk IP vkDlhtu l vf/kd gkrk gj D;kfd –
(1) NkVk vkdkj (2) vðifjp-d{kd dk LFkkf;Ro
(3) cMk vkdkj (4) bue l dkb ugh

Q.67 dkcu dh pr"Qydh; vkd fr lcl igy fdlu nh –
(1) ddy (2) yh-cy okVgkQ (3) ekjdkfudkQ (4) fofy;elu

Q.68 ekdkuhdkQ vfHkfØ;k nrk g –
(1) l r Ir gkbMkdkcu (2) v l r Ir gkbMkdkcu (3) bFkj (4) ,Ydkgy

Q.69 fuEu e l dkulh /kkr eDr voLFkk e g –
(1) Al (2) Mg (3) Cu (4) Fe

Q.70 jkbej Vheku vfHkfØ;k e dke vkrk g –
(1) $CHCl_3$ (2) C_2H_5Cl (3) C_2H_5OH (4) CH_3CHO

Q.71 ukfHkdLugh ,fyQfVd foLFkkiu e ukfHkdLugh lekU; r% gkrk g –
(1) vEy (2) {kkj (3) mnklhu (4) yo.k

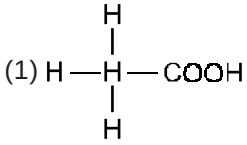
Q.72 xfcy FkyekbM l?kuu vfHkfØ;k l ikIr gkrk g –
(1) 1° ,ehu (2) 2° ,ehu (3) 3° ,ehu (4) bue l dkb ugh

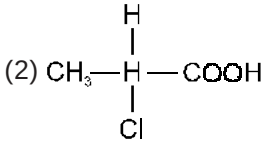
Q.73 ,fYMgkbM o dhVku e fdl d }kjk foHkn djr g –
(1) NH_3 (2) Qgfyx foy;u (3) H_2SO_4 (4) $NaHSO_4$

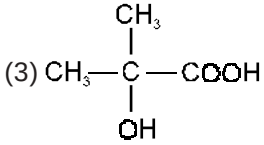
Q.74 fn;k x;k byDVkfud foU;kl $3d^2 4s^2$ fdl leg d rRo dk g –
(1) s-Cykd (2) p-Cykd (3) d-Cykd (4) f-Cykd

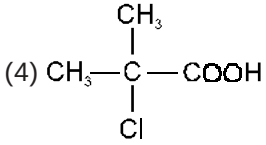
Q.75 lØe.k rRo gkr g –
(1) lHkh /kkr (2) dN /kkr dN v/kkr (3) mPp fØ;k'khy (4) fefJr /kkr

Q.76 dkulk idkf'kd lfØ; g –

(1) 

(2) 

(3) 

(4) 

Q.77 o|r l;kt d cU/k g &
(1) BF_3 (2) $SiCl_4$ (3) $MgCl_2$ (4) CH_4

Q.78 CH_3CONH_2 dh P_2O_5 l fØ;k }kjk curk g–
(1) ,fFky ,ehu (2) ,fFky ,Ydkgy (3) ,flfVd vEy (4) efFky lk;ukbM

Q.79 dkckfuy leg e l dj.k gkxk–
(1) sp^2 (2) sp^3 (3) sp (4) All

Q.80 ,Lihu g–
(1) ,flfVy lfyflfyd vEy (2) efFky lfyflfyd vEy
(3) efFky lfylyV (4) ,fFky lfylyV

Q.81 fdle mi lgl;kt d c/k g–
(1) CH_3COOH (2) H_2O (3) NH_4Cl (4) $AlCl_3$

Q.82 ckLVM o ykjh d vulkj vEy o {kkj nkuk g–
(1) H_3O^+ (2) HCO_3^- (3) SO_4^{-2} (4) Cl^-

Q.83 ,Y;fefu;e dkckbM dh ty l vfHkfØ;k }kjk curk g–
(1) CH_4 (2) C_2H_6 (3) C_2H_2 (4) C_2H_4

Q.84 dkulk yo.k ty vi?kVu nrk g–
(1) CH_3COONa (2) KNO_3 (3) KCl (4) K_2SO_4

Q.85 ybl flðkUr d vulkj vEy g–
(1) ikVku nkrk (2) ikVku xkgh (3) ,dkdh byDVku ;Xenkrk (4) ,dkdh byDVku ;Xexkgh

Q.86 $CH_3—CH_2—X + KOH(,Ydk) \longrightarrow C_2H_4$ mijkDr vfHkfØ;k g–
(1) foykiu (2) ifrLFkkiu (3) ;kxkRed (4) iufoU;kl

Q.88 cthu e ,flfVd vEy f}yd dh rjg dk; djrk g D;kfd–
(1) COOH leg d dkj.k (2) α – H dh vEyh;rk d dkj.k
(3) H–c/k d dkj.k (4) bue l dkb ugh

Q.89 icy vEy dk l;Xeh gkrk g–
(1) icy {kkj (2) ncy {kkj (3) ncy vEy (4) bue l dkb ugh

Q.90 i Foh l /kkr fdll ikIr dj ldr g–
(1) [kfut (2) dPpk inkFk (3) ;kfxd (4) yo.k

Q.91 H – c/k vuifLFkr g–
(1) C_2H_5OH (2) H_2O (3) CH_4 (4) NH_3

Q.92 mRØe.kh; vfHkfØ;k e ox gkrk g–
(1) leku (2) vyx& vyx (3) vf/kd (4) vfuf'pr

Q.93 vipk;d inkFk gkrk g–
(1) byDVku xg.k djrk g (2) byDVku nrk g (3) ikVku nrk g (4) ikVku yrk g